

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/009956

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ H05K13/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ H05K13/04

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

| | | | |
|---------------------------|-----------|----------------------------|-----------|
| Jitsuyo Shinan Koho | 1926-1996 | Jitsuyo Shinan Toroku Koho | 1996-2004 |
| Kokai Jitsuyo Shinan Koho | 1971-2004 | Toroku Jitsuyo Shinan Koho | 1994-2004 |

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| Y | JP 11-150398 A (Sony Corp.), 02 June, 1999 (02.06.99), (Family: none) | 1-16 |
| Y | JP 2002-83028 A (Mitsubishi Electric Building Techno-Service Co., Ltd.), 22 March, 2002 (22.03.02), (Family: none) | 1-16 |
| Y | JP 2000-331069 A (Sharp Corp.), 30 November, 2000 (30.11.00), (Family: none) | 6-8, 13, 14 |

 Further documents are listed in the continuation of Box C. See patent family annex.

| | |
|---|--|
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| "A" document defining the general state of the art which is not considered to be of particular relevance | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
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| "O" document referring to an oral disclosure, use, exhibition or other means | "&" document member of the same patent family |
| "P" document published prior to the international filing date but later than the priority date claimed | |

Date of the actual completion of the international search
10 August, 2004 (10.08.04)Date of mailing of the international search report
24 August, 2004 (24.08.04)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| Y | JP 2003-2444 A (Nissan Motor Co., Ltd.), 08 January, 2003 (08.01.03), (Family: none) | 11 |